Salmon Recovery: Endangered Species Act Tools and Local Roles

A series of workshops for local and regional governments, tribes, watershed councils, and other interested parties sponsored by the National Marine Fisheries Service

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Two Tools for Understanding How Human Activities Effect Listed Species and Their Habitat

Two NMFS documents, (1) ***Making Endangered Species Act Determinations of Effect for Individual or Grouped Actions at the Watershed Scale***, and (2) ***Habitat Approach***, are attached as reference materials for a series Salmon Recovery Workshops being conducted by NMFS in Oregon and Washington. One of the purposes of the workshops is to have participants understand salmon habitat needs. Presentations will be made by NMFS staff describing properly functioning condition (PFC) for fish habitat and how NMFS evaluates the effects of human activities on listed species and their habitats. These documents are among the "tools" NMFS will share with workshop participants to explore effective approaches to save salmon and comply with the federal ESA.

The attached document, ***Making Endangered Species Act Determination of Effect for Individual or Groups Actions at the Watershed Scale***, is an analysis model for determining the effects of human activities on salmon habitat in a consistent, accurate manner. The guidance incorporates a Matrix of Pathways and Indicators, or MPI. In the MPI framework, the pathways for determining the effect of an action are represented as six conceptual groupings (e.g., water quality, channel condition) of 18 habitat condition indicators (e.g. temperature, width/depth ratio). Indicator criteria (mostly numeric, though some are narrative) are provided for three levels of environmental baseline condition: (1) properly functioning, (2) at risk, and (3) not properly functioning. The effect of the action upon each indicator is classified by whether it will restore, maintain, or degrade the indicator. The MPI provides a consistent, but geographically adaptable, framework for making effect determinations. The pathways and indicators, was well as the ranges of their associated criteria, may be refined through watershed analysis. NMFS recommends consideration of this model for entities seeking an analytical approach, but does not prescribe it. Indeed, any scientifically credible analysis is acceptable to NMFS.

Performance of ESA section 7(a)(2) consultations regarding proposed actions sometimes requires NMFS staff to make "jeopardy" determinations. For habitat-affecting actions, NMFS usually employs the concept of properly functioning condition "PFC" when making these determinations. The attached ***Habitat Approach*** defines PFC and provides guidance to NMFS biologists regarding its application in jeopardy analyses. While the document was prepared to provide guidance specifically in the section 7 context, NMFS applies the same habitat conservation standard to all ESA section. The principles laid out in the **Habitat Approach** are particularly useful to draw conclusions from the data generated by the MPI analysis, and so may be used by any entity.